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Department of Water Resources

California Water News

A daily compilation of significant news articles and comment

Breakdown: 'The Cadillac of California irrigation districts' has more than a tiny fish to blame for its troubles

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By Matt Jenkins

On Sept. 17 of last year, the famously hypertensive right-wing Fox News commentator Sean Hannity rolled into the West Side of the San Joaquin Valley, satellite truck in tow. Months earlier, when it became clear that a 2-year-old drought would grind on for another year, the federal government announced plans to slash water deliveries to local farmers. Hannity smelled blood.

He, and many others, quickly blamed the whole crisis on a two-inch-long fish called the Delta smelt, which is protected under the Endangered Species Act. The bright yellow CONGRESS CREATED DUST BOWL signs that began popping up all over the valley were prime-time stuff. And, at least in Hannity's telling, the farmers' fight against the water cutoff was swathed in the populist bunting of a peasant revolt against heavy-handed government.

These farms are muscular emblems of American-style production agriculture, and odds are better than even that something inside your fridge

right now was grown on the West Side. One of Heinz's biggest suppliers grows and processes tomatoes here, and the green-produce giant Tanimura & Antle sends armies of workers into the fields to harvest lettuce. The relatives of one of the district's founders raise the organic spinach that goes into Amy's-brand pizzas and vegetable pot pies.

The farmers are confederated as the Westlands Water District. The largest irrigation district in the United States, it has a reputation for bare-knuckled combativeness. But Westlands has fared badly in the face of the drought, complicated by the Endangered Species Act, which has stringent protections for the smelt and several other fish that are affected by pumping operations. Because farmers received only 10 percent of the water they held federal contracts for, they were forced to leave roughly 156,000 acres -- about a quarter of the district -- unplanted this year.

And so Hannity arrived to check out the damage for himself. His retinue set up camp on a fallowed field, clipped microphones to the area's congressional delegation, and began beaming the farmers' plight to the world. As a boom cam floated over the sign-toting, flag-waving throng, Hannity said, "The government has put the interests of a two-inch minnow before all of the great people that you see out here tonight." He brandished a blown-up photo of a smelt and said: "This is what this comes down to: No water for farmers, because of this fish."

The crowd gave a hearty boo. Then the cameras turned to the darling of the hour: Rep. Devin Nunes, the hot-headed 37-year-old Republican who represents the neighboring congressional district. "The liberals and the radical environmental groups have been working on this for decades: They've been trying to turn this into a desert," Nunes fumed. "And what's important about you being here tonight -- and the rest of your viewers need to understand -- is this could happen to you. They're on their way. Nancy Pelosi's the speaker of the house. George Miller's her lieutenant. They're on their way to the rest of America."

But there was more to the story than the drama that Fox News beamed out of Westlands that day. Congressman Nunes had been hard at work in Washington, D.C., introducing a series of amendments that would force the federal government to ignore the Endangered Species Act when it determined how much water to deliver to farmers this year. His efforts were repeatedly turned back. Then, five days after Hannity's broadcast, Jim DeMint, a conservative Republican from South Carolina, introduced a similar amendment in the Senate, with Westlands' endorsement. That's when the needle skipped off the record.

California's warhorse Democrat, Sen. Dianne Feinstein, has been a longtime champion of Westlands, but she has also tried to negotiate common ground in the state's complicated water politics. And back home, the California Legislature -- after years of ignoring the problem -- was working feverishly to hammer out a sweeping package of bills to relieve the crisis in the Delta. When Feinstein learned of the DeMint amendment, she denounced it as "a kind of Pearl Harbor on everything that we're trying to do."

The amendment failed. Several days later, before a press conference at the U.S. Department of the Interior, Feinstein approached Tom Birmingham, the man who runs Westlands, and pulled him aside. The senior senator from California managed a tight smile, and then shook her fist at Birmingham, who has contributed to her campaigns. "Tom, I'm angry," she said. "I'm so angry that I want to punch you."

Chastened, Birmingham later made a rare admission that Westlands had gone too far. "We just made a terrible, terrible mistake," he said in early November. "We made a mistake, and we need to acknowledge that."

With scant naturally available water, the West Side was an unlikely place for an agricultural empire to begin rising roughly a century ago. Yet the

farmers in Westlands have shown a rare knack for overcoming adversity and actually turning a profit in sometimes seemingly hopeless circumstances.

Westlands has never been afraid to aggressively seek advantage wherever it could, and the district has played its cards well. But the foundation beneath the entire enterprise has always been unstable. And if the drought is revealing anything, it is not government regulation run amok but an empire that may have seriously over-extended itself.

In the 1980s, veteran reporter Eric Brazil dubbed Westlands "the Cadillac of American irrigation districts." Westlands has a defiant air of invincibility, and its leaders have never blinked when trouble materialized -- including at the very start.

Farmers first tried to make a go of it on the West Side in the late 1800s. They found themselves blessed with deep, rich, Panoche sandy loams that had eroded out of the nearby hills —- and cursed with scanty local water. That, in turn, inspired a number of creative efforts to correct the problem. In 1924, for instance, the city of Coalinga paid $8,000 to Charles Mallory Hatfield to make it rain. He set fire to a secret recipe of chemicals, and induced the heavens to pour forth.

By that time, though, most farmers were looking not to the skies but to the ground beneath their feet for water. The invention of deep-well pumps allowed them to reach the groundwater beneath the dry scrub, and farms began spreading across the West Side. But by the 1940s, trouble was on the horizon. As the pumps furiously sucked water from beneath the valley, the ground beneath them sank like a collapsing soufflé, leaving some pumps stranded 10 feet in the air.

This time, the farmers turned to the government. In 1952, several prominent landowners on the West Side organized the Westlands Water District and began lobbying for water from the delta formed where the Sacramento and San Joaquin rivers meet, a hundred-odd miles to the north, before flowing to the Pacific. In 1960, Congress agreed to finance construction of San Luis Reservoir and a canal to the water district, as part of the massive Central Valley Project. On Aug. 18, 1962, President John F. Kennedy helicoptered into the valley to join Gov. Pat Brown. "It is a pleasure for me to come out here and help blow up this valley in the name of progress," Kennedy said, before setting off an explosive blast that broke ground for the reservoir.

Today, Westlands sprawls across 605,000 acres. Tomatoes and almonds are the two most-widely grown crops, but farmers grow everything from alfalfa to garbanzos to pomegranates — more than a billion dollars' worth of crops in a normal year. Westlands is famously secretive about how many farm operations actually do business in the district. The official line is that Westlands is home to "more than 600 family farmers," but many of those are, in fact, parts of large family partnerships. Farms run from couple-hundred acre operations to Woolf Farming's roughly 25,000-acre spread.

When Westlands lobbied for the construction of the San Luis Reservoir, the district's farmers hitched their star to the fate of the Sacramento-San Joaquin Delta. For most Californians, the Delta is a world far from mind, but it is the heart of California's complex water-supply system. Two enormous batteries of pumps on the edge of the Delta feed the federal Central Valley Project and its sister, the State Water Project.

Those two projects, in turn, push water south to over 1.2 million acres of farmland and more than 25 million people, primarily in Los Angeles and San Diego. It's a complex system, but the Delta's ecosystem is even more complicated -- and fragile. It is a critical link in California salmon's annual spawning runs, and is home to more than 120 species of fish, including the smelt.

By the late 1980s, it was becoming clear that competing demands for the Delta's water could unravel everything. Barry Nelson, a water policy analyst with the Natural Resources Defense Council, has called the Central Valley Project "the biggest single environmental disaster ever to strike California."

The meltdown that drew Sean Hannity to the West Side last summer had been brewing since at least 1989. That year, the winter run of chinook salmon in the Sacramento River fell so low that the federal government added the fish to the endangered species list. Then, in 1993, the Delta smelt was classified as threatened.

For a time, there was a promising shift. In 1992, after a long, hard fight, Congress passed the Central Valley Project Improvement Act; then, in 1994, water users, environmentalists and the federal government reached an agreement called the Bay Delta Accords. Together, the two offered hope for a more balanced approach to juggling the water demands of farms and cities with protection for the Delta's fisheries.

For roughly the next decade, California went through a series of gyrations, centered around a joint state-and-federal effort called CALFED, that marked a new period of collaborative management.

Yet the Delta fisheries only got worse, and the Delta smelt provided the clearest signal that something was wrong. Bruce Herbold, an Environmental Protection Agency scientist involved in an ongoing investigation into the collective fish decline in the Delta, says that the smelt, unlike other fish, spends its entire one-year life span in the Delta, "so it's a really good animal to tell you what's happening."

By 2004, smelt populations had fallen to record lows, even as pumping intensified. Water "exports" to farms and Southern California's cities had topped 6 million acre-feet for the first time in 1989, and then tapered off to a low of about half that during a drought in the early 1990s. Then, fast on the heels of the Central Valley Project Improvement Act and the Bay-Delta Accord, exports began climbing. In 1996, they hit 6 million acre-feet again. And by 2005 they had reached a new record high.

"We have been steadily ramping up diversions from that system, year after year, for a long time. And we've just hit limits. We haven't yet seen extinctions, but we're on the razor's edge," says Nelson. "And right now, (the Delta smelt protections are) the tool that has prevented the projects from driving the system completely over the edge."

Those protections are determined by a U.S. Fish and Wildlife Service analysis called a biological opinion, which is meant to ensure that the pumping plants do not violate the Endangered Species Act. While the pumps themselves kill fish, they have also dramatically reshaped the hydrology of the Delta: they have broken a natural cycle in which salty water from San Francisco Bay would wash through parts of the Delta each winter, and they have re-oriented flows from east-to-west to north-to-south.

The biological opinion, which was first issued in 2005, asserted that pumping could be increased without harming the smelt. The Natural Resources Defense Council sued to force the feds to redo the opinion, and in 2007, won a favorable ruling from federal District Judge Oliver Wanger. To protect smelt and other species during key stages in their life cycles, a court-ordered revised opinion limits the times that pumps can be used -- and, by extension, the amount of water that they can send south.

With the onset of the current drought in 2007, and with Judge Wanger's ruling, water exports plummeted and have continued to fall. The fish -- and the communities that depend on fish -- haven't done any better. Last year,

salmon runs collapsed so badly that federal regulators shut down the state's commercial salmon fishery for the second year in a row, throwing fishermen from San Francisco to the North Coast out of work.

Many farmers echo Hannity in blaming the restrictions solely on the fish-protection measures. But Lester Snow, California's top water regulator, and David Hayes, the deputy secretary of the Interior, both point out that fish-related pumping restrictions accounted for only a quarter of the reduced exports from the Delta this year. (A recent report by the Public Policy Institute of California put the number even lower, at 15-20 percent.) The real culprit behind the low deliveries is the drought.

In the meantime, the collaborative-management efforts have been crumbling; CALFED collapsed in 2006 in part due to a lack of funding. As a result, the Delta crisis was, for the most part, being immediately addressed only in the courts.

Last year, however, even as Feinstein was shaking her fist in Birmingham's face in Washington, California state legislators were hammering out a package of bills that promised to breathe new life into the ideal of balancing water extraction and environmental protection. The package would require the state to establish standards for how much water would be allowed to flow from the Delta out to the Pacific, a critical element for protecting fish populations. It would also create an oversight council and legal backstops to prevent an outright run on the Delta for more water.

More controversially, however, the package lays the groundwork for what is most often referred to as the Peripheral Canal, a 25-year-old idea that has generated plenty of contention before. The canal would allow water users to directly tap the Sacramento River -- the major contributor of water to the Delta -- and route water straight to the pumps that push it to the southern half of the state. That could protect the freshwater from a large earthquake- or climate-driven sea level rise that would cause a massive infusion of salt

water into the Delta.

A canal might also help untangle the snarl formed by competing demands. It would essentially separate the water in the Delta, shunting the water allocated to farmers and cities around the estuary rather than through it, and allowing environmental flows to be used to mimic the Delta's more natural, variable self.

The proposal has divided environmental groups. "There's this notion that the best way to restore the Bay-Delta is to separate the fish from the water," says Jonas Minton, the water policy advisor for the Planning and Conservation League. "That's as biologically unsound as it sounds. This is an attempt by large agribusinesses and Southern California developers to take even more water."

Other groups, including the Environmental Defense Fund and Natural Resources Defense Council, have endorsed the package. "Five or 10 years ago, NRDC would have said no way, no how" to a Peripheral Canal, says Doug Obegi, a Natural Resources Defense Council attorney. The realities of the collapsing Delta have caused the group to shift its stance. But, he adds, "how it's operated -- whether it's good for the environment -- really does make or break the project."

On Sept. 11 last year, the clock ran out on an intense round of negotiations over the water package during the regular legislative session. Schwarzenegger, threatening to veto hundreds of bills, forced lawmakers back for a special session. Finally, on Nov. 4, the Legislature passed the package.

All told, the projects in the package could ring in at more than $40 billion. This November, California voters will be asked to approve the publicly financed portion of the plan, an $11 billion bond. It is not at all clear that Californians will have the appetite for new debt when the state is already

teetering under a $21 billion budget deficit.

And even if voters approve the package, relief could still be far off for Westlands. The canal wouldn't carry any water until 2018 at the earliest. And that raises the question of how far water districts like Westlands will go to protect themselves in the meantime.

How are we going to survive between now and the time that these long-term solutions can be implemented?" says Westlands boss Tom Birmingham. "If we have to live with the existing biological opinions until 2018, there are a lot of farmers in Westlands Water District that simply will not survive."

As of November, Westlands' fighting spirit was still much in evidence. In a barren field on the west side of the district, a yellow sign screamed, "CHANGE the LAWS or we'll CHANGE CONGRESS!" A passing semi tooted its air horn in approval.

Westlands is, somewhat paradoxically, in the most vulnerable class of water users that receive water from the Central Valley Project. During droughts, the project delivers water first to wildlife refuges and to irrigation districts that were formed before the first portions of the project were built in the 1930s. Cities come next, and finally more recently created agricultural districts, such as Westlands. In a wet year, Westlands receives 40 percent of all the water delivered through the Central Valley Project. But in a dry year that percentage can be much less -- in 2008, for example, Westlands' share was only 18 percent.

That vulnerability has shaped the district's dealings with the outside world. "We've had to be more aggressive, politically and legally, than water districts with a firmer supply of water," says Frank Coelho, a farmer who

has been on the district's board of directors since 1991. "It's just the nature of trying to survive."

Tom Birmingham is the man charged with defending the district's interests, and pretty much everyone involved in the state's water politics keeps a close eye on his every move. Water bosses like those at the Metropolitan Water District of Southern California, which supplies water to 19 million people in Los Angeles and San Diego, have gradually reached out to environmental groups. But Birmingham is not the type to hold up an olive branch, even though Westlands was careful to keep its name out of Hannity's environmentalist-bashing broadcast.

"Birmingham is devout. He's a believer," says one Westlands farmer. "He's a believer in the idea that farmers on the West Side should be allowed to farm. And a lot of people on the other side of that proposition" -- a reference to critics who say Westlands is a water-guzzling, fish-killing monster -- "would like to see the end of the district."

Birmingham began working as an outside attorney for the district in 1986, after a short stint with the pro-property-rights Pacific Legal Foundation. Fourteen years later he became Westlands' general manager. Birmingham tends not to mince words, and few people are as critical as he is of the effort to save the Delta. "The pumping restrictions have done absolutely no good for the fish," he says. "We've dedicated millions of acre-feet of water per year to protect those species, and they're still declining."

Even though, overall, Delta pumping increased between 1990 and 2005, Westlands has seen the reliability of its water supply erode, thanks to a complicated mix of federal and state pumping and priorities. Before 1993, the pumps could run all year long. Then the smelt was listed, and the window during which Westlands could pump water grew smaller and smaller.

Because that window now limits pumping to only the second half of each year, water users can't take advantage of the extra water available in the Delta at other, wetter times of the year like the winter. "What we want to do," says Birmingham, "is restore the ability of those pumps to operate at capacity year-round."

The quest to re-open the pumping window lies at the heart of Westlands' survival strategy. In search of relief, the district turned to Congressman Nunes and Sen. DeMint for Endangered Species Act waivers last year. Last March, Westlands -- through a broader group of local irrigation districts -- also sued the federal government to overturn the smelt biological opinion. Birmingham is particularly critical of the science behind the opinion, and says that a host of other problems, including pesticide runoff, invasive fish and high levels of ammonia from urban waste-treatment plants, are responsible for the Delta fisheries collapse. That case is still working its way through court, but in December, Westlands and the Water Authority asked Judge Wanger for an injunction to prohibit the pumping restrictions this year -- a motion that the judge will consider this month.

Yet even as Westlands aggressively challenges the biological opinions, it is one of the main participants in the quiet, ongoing series of negotiations to create a Bay-Delta Conservation Plan. The plan, which emerged in the wake of CALFED's collapse, seems likely to provide at least the raw DNA for the new governance entity mandated by the water package the California Legislature passed in November.

Some environmental groups view that process skeptically. "The environmentalists can sit in the back seat and offer suggestions," says the Planning and Conservation League's Minton, "but they don't have the grip on the steering wheel."

But Ann Hayden, a senior water resource analyst with the Environmental Defense Council, who represents environmental groups in the process, says that the conservation plan has kept the water users' quest for better water reliability yoked to a meaningful effort to protect the Delta. In "this world of constant litigation, we've actually been able to make quite a bit of progress in the BDCP," she says. "I think we have a promising foundation to work from."

Still, the DeMint amendment and the political wrangling over Endangered Species Act waivers "has created a lot of tension in the BDCP process," she says.

The state's environmental groups are watching to see what happens when Congress returns this month.

Sen. Feinstein has been working on several fronts to help Westlands and other water users. Last fall, she requested a review of the smelt biological opinion by the National Academy of Sciences; a preliminary report should be out this spring. The Senate will also consider a bill she introduced that would streamline the federal government's review and approval of water transfers.

Birmingham says that Westlands has not ruled out asking Congress for help in getting a waiver from the Endangered Species Act. "We will pursue every potential remedy," he says. But "not," he is careful to add, "without the express consent of Sen. Dianne Feinstein."

There is an uneasy sense of déjà vu in Westlands these days. Because its Delta water supply is so unreliable, Westlands, unlike most of the rest of California, has been fairly proactive in managing its groundwater, which is its farmers' insurance policy for dry times. But over the past three years, farmers have been drilling many new groundwater wells, and they have fired up many previously idle ones, too. As its Delta supplies have

plummeted, Westlands' groundwater use has dramatically increased. The district estimates that its farmers pumped half a million acre-feet this year.

At the edge of an almond orchard on his farm, 41-year-old Shawn Coburn shows off a new well with a mixture of pride and chagrin. "This is a million-dollar hole," Coburn says. It goes 1,800 feet down, and taps into a nasty realm. "Say a prayer, because there is a hell. When this water comes out of the ground, it's 97 degrees."

It's also heavily laden with salt and boron, so it has to be used sparingly and mixed with scarce canal water. It is hell on pumps: Many are rotting out from the inside because the chemical concentrations are so strong. And the groundwater has an equally diabolical effect on crops. Farmers who had to rely solely on well water to grow lettuce saw their crops yield stunted, disease-prone heads fit only for shredded salad mix.

The drought is already beginning to reshape the district. "A small farmer can't afford to go out and punch a million-dollar hole in his dirt," says Coburn. As smaller growers go bust, one of the district's largest landowners says he is considering whether to buy their ground.

District insiders also say that the drought and water restrictions are taking a toll on the finances of the water district itself. Last year, Westlands had to cover a $93 million operating budget with shrinking revenues. Because irrigation districts have to maintain their full pipeline system to deliver even much-reduced supplies of water, they're ill-equipped to trim operating expenses in dry times.

"You have a minimum operating budget divided by a smaller and smaller supply, so prices have gone up considerably," says Dan Errotabere, who sits on Westlands' board and whose family partnership farms about 5,500

acres. "We have a little bit of reserve that we try to use to smooth prices out, but you quickly burn that up."

Contrary to popular perception, Westlands is relatively water efficient. The district's entire distribution system is underground pipe, instead of open canals that lose water through evaporation. And its farmers have gone in for drip irrigation -- widely recognized as the most efficient form of irrigation -- in a big way.

Frank Coelho, the Westlands board member, is the grandson of a Portuguese immigrant who came to the West Side from the Azore Islands in 1917. Coelho's family partnership farms about 8,000 acres, primarily growing tomatoes. "Our first drip went in in 2000, and we'll be 100 percent drip on our ranch (this) year," Coelho says. "Nobody stretches a gallon of water in agriculture like Westlands does."

Last year, fully half of the district's farmed acreage was drip-irrigated. Yet the adoption of this method has been driven less by a desire to save water than by the fact that drip increases crop yields by as much as 50 percent. And while farmers have made a major shift away from cotton, a fairly heavy water user, the replacement crops don't necessarily use any less. Almonds, for instance, which now cover more than 68,000 acres, use just as much water as cotton does.

Indeed, in spite of the recent irrigation and crop shifts, Westlands' total water demand has not gone down. Birmingham says that the district's annual demand for water is 1.4 million acre-feet per year. That's 210,000 acre-feet more than Westlands holds contracts for from the Central Valley Project. In a year with full deliveries from the project, Westlands could almost make the math work. The amount of water that can be pumped reliably over the long term without depleting the aquifer is roughly 200,000 acre-feet, about what it would take to cover the difference.

But in any year with a less than 100 percent supply from the Central Valley Project, the district runs a deficit that it must cover by buying water in the open market (at rates that, this year, were four times what Westlands paid for its own water), or by pumping groundwater at unsustainable levels.

Over the past 22 years, a period that extends back beyond the first restrictions in the 1990s, Westlands -- even after buying water and relying on wells -- has only once managed to pull together a full 1.4 million acre-feet. And even as the district's water supply has become less reliable, many of Westlands' farmers have made themselves more vulnerable to water shortages. Today, as much as a third of the district's cultivated acreage is planted to permanent crops like grapes and almonds -- crops that farmers can't fallow in a dry year.

Once already, the district has been forced to confront the fact that it is over-extended. In 2002, it settled a lawsuit filed by a group of Westlands farmers because there wasn't enough water to ensure equal deliveries to everyone, by permanently retiring about 90,000 acres. That reduced the farmed acreage in the district by about 15 percent, and increased the amount of water available to the remaining landowners.

That may be about to happen again. As the Coast Range eroded to form the Panoche sandy loams that thrill the farmers here, its rocks infused those loams with the toxic element selenium. In 1983, the selenium-poisoned runoff led to an outbreak of gruesome deformities in birds at the Kesterson Wildlife Refuge, which, despite its name, was little more than a sump for the selenium-contaminated water that trickled out of Westlands.

For years, Westlands has been negotiating with the federal government to retire as many as 200,000 acres that have selenium and drainage problems. That would shrink the farmed area in Westlands to about half of

its former size, in exchange for a firmer, though somewhat smaller, supply of water.

Taken together, Westlands' water and drainage problems suggest that, in the future, the district will look quite different than it did in its heyday. And as the entire state grapples with drier times, irrigation districts like Westlands are assuming new importance as a potential source of water transfers for the agencies, like the Metropolitan Water District of Southern California, responsible for keeping cities supplied through good years and bad.

Birmingham, and many Westlands landowners, remain adamant that the district won't sell its water off to outsiders. "It hasn't happened, and it isn't going to happen," says Birmingham.

Still, the prospect of selling water does quietly figure into the farmers' calculus. "It's gotten a lot of talk," says Errotabere. "It's the realization that we've been squeezed so hard that now people are giving up water supply to survive. If you're a financial steward of whatever operation you've got, you have to consider whether it's better to park the ground and sell the water next year."

Back in November 2003, when Arnold Schwarzenegger was sworn in as governor of California, his predecessor, Gray Davis, left him with a piece of parting advice. "Pray for a good economy," he said, "and rain."

Six years later, it appears that Schwarzenegger has not prayed hard enough on either count. For the first time in a long time, however, the state seems ready to confront the Delta crisis. Last year was just the first step in what is sure to be an exhausting process that will go on for years. Over the next decade, the state's water system and its water politics could be

dramatically transformed. But peril lurks at every turn. And every winter brings a new roll of the dice that could either push things to the breaking point, or buy the state a year's reprieve.

John Diener is the nephew of one of Westland's founding fathers. Although he seems happiest dispensing folk wisdom from behind the wheel of his GMC pickup, he is known as one of the most progressive farmers in Westlands.

In November, Diener wheeled the truck through his fields, checking on next spring's crop of organic spinach. It had been an extremely frustrating year: Diener had fallowed about 750 acres, and he hoped that this year would be better. "Just having dirt for the joy of having dirt is great," Diener said. "But our business is about growing things."

When I asked what needed to happen next, Diener thought for a moment before saying, "We pray a lot!" He burst out laughing, and then thought some more. "We would like to see some biological opinions reviewed. And, God willing, it rains.

"I mean, honest to God," he said, "we do need it to rain."#

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